Bio

CH # 10

Aerobic respiration, function of mucous, voice box and vocal cord, trachea and alveoli, glottis and epiglottis, bronchi and bronchioles, inhalation and exhalation, pleural membrane,dapharghm, types and symptoms of bronchitis, symptom of asthma , emphysema and pneumonia, nicotine, double pneumonia and its causal bacteria, lung cancer n it cause, arteriosclerosis, passive smoking,lung cancer n its cause, two bad effect of smokings

SHORT QUESTIONS EXERCISE : 1,2 **UNDERSTANDING THE CONCEPTS : 4**

CH # 11

Homeostasis, Osmo and thermoregulation, Turgidity, guttation and dew, transpiration,hydrophytes xerophtes n halophytes with example, nephron and its parts, renal cortex and renal medulla, hillus and pelvis, **glumerrular filtrate, selective reabsorption and tubular secretion(S.Q + L.Q),** Name of organs for homeostasis in human with its function, afferent and efferent arteriole,lithotripsy, Kidney stone cause n symptoms,kidney failure n its major causes, kidney transplant, Dialysis n dialyzer

SHORT QUESTIONS EXERCISE : 1 **UNDERSTANDING THE CONCEPTS** : 1,4

CH # 12

Name of coordinated action and also define it, sensory and motor neurons and nerves, saltatory impuse,ganglions, dendrites and axons, nerve impulse, mid brain, brain stem, function of thalamus and hypothalamus, hippocampus, meninges, spinal cord and its function, aqueous n vitreous humour, exocrine gland, **disorders of eye(S.Q + L.Q),** , acromegly and dwarfism, hypo and hyperthyroidism, Tetany, function of oxycitocin , gonads, sympatic and parasympathic nervous system, paralysis cause n symptoms

SHORT QUESTIONS EXERCISE : 1,3,4,8 **UNDERSTANDING THE CONCEPTS** : 1, 5, 7, 10

CH # 13

Locomotion n movement, Endoskeleton and exoskeleton, **elastic, hyaline and fibrous cartilage(S.Q + L.Q), Bone with its types and explain its functions(S.Q + L.Q),** , chondrocytes and osteocytes, Andreas Vesalius, **Role of tendons and ligaments(S.Q + L.Q), antagonism, Bicep and tricep(S.Q + L.Q),** , flexion and extension, origin and insertion, osteoporosis n its causes, function of estrogen,Gout

SHORT QUESTIONS EXERCISE : 1,2

CH # 14

Reproduction, types of reproduction, multiple fission, fragmentation, budding wit example in corals, endospores, calluses,suckers, **advantages n disadvantages of vegetative propagation(S.Q + L.Q),** ,alternation of generation, **pollination and its types(S.Q + L.Q),** , double fertilization, micropyle n hillum, dormancy,epi n hypocotyls,epigeal and hypogeal germination, spermatogenesis and oogenesis, internal and external fertilization, **STD AIDS and its causes (S.Q + L.Q),**

SHORT QUESTIONS EXERCISE : 2, 4 **UNDERSTANDING THE CONCEPTS** : 4,7

CH # 15

Genetics and Trait , Nucleosome,Homologous chromosome, gene loci and allele, transcription and translation characteristics of pea plant, monohybrid and dihybrid cross, types of genotypes and types of allele, law of independent assortment and segregation, punnet square , central dogma, co

dominance n incomplete dominance,two sources of veriations, types of variations, theory of special creation, Darwin book, gene flow, breed and cultivar,organic evolution, true breeding, Nirogenou bases of DNA, natural n artificial selection,

SHORT QUESTIONS EXERCISE: 1,2,3,4 **UNDERSTANDING THE CONCEPTS** : 1

CH # 16

Ecology , biosphere , population and community, species, decomposers with examples , carnivores and herbivores,trophic level, ecological pyramids and biomass, biogeochemical cycle,nitification and denitrification, ammonification n assimilation, competition and name its types, symbiosis and commensalism, mutualism and parasitism, endo and ecto parasites,two disadvantages of deforestation, acid rain n one effect,global warming n its effects, smog n eutrophication, environment friendly fuel, deforestation n aforestation, renewable and non renewable resources, **3 R**

SHORT QUESTIONS EXERCISE: 1,2,4,5

CH # 17

G.E , Biotechnology and human genome project, Gene therapy,dairy products, **fermentation and its types (S.Q + L.Q),** , two uses of glycerol and formic acid, **continuous n discontinuous fermentar(S.Q + L.Q),** , fermenter n its advantage , genatic engineering and recombinant DNA, steps of genetic engineering, **Four Objectives of G.E and four achievements of Genetic engineering (urokinese interferon , thymosin and beta endorphin)** , endonuclease and ligase ,scp novel protein

SHORT QUESTIONS EXERCISE : 1,3,4

CH # 18

Drug,Synthetic drugs, Sedatives,antibody n antigen, anticeptic and disinfectants, cephalosporin's, bactericidal and bacteriostatic, vaccine and vaccination, sulpha drug, hallucinations, social stigma, iodine tincture, Function of hallucinogen, narrow and broad spectrum antibiotics, Edward Jenner contribution, joseph lister, social stigma **SHORT QUESTIONS EXERCISE:** 1 to 5

MOST IMPORTANT LONG QUESTIONS

CH # 11

Homeostasis in plants in detail, Structure of nephron explain with diagram**(V.V.IMP)**, Osmorgulatory functions of kidney**(V.V.IMP),** Kidney stone, Dialysis types **(V.V.IMP)**,

CH # 13

Component of human skeleton, **Joints and it types S.Q + L.Q (V.V.IMP)** , Arthritis and its types **(V.V.IMP)**

CH # 12

Structure of Neuron**(V.V.IMP)**, Hind Brain**(V.V.IMP)**, Feedback mechanism n explain its types **(V.V.IMP)**, Reflex action, Pituitary gland, Thyroid gland and pancreas**(V.V.IMP)**

CH # 14

Binary fission**(V.V.IMP)** , Natural and Artificial vegetative propagation**(V.V.IMP)**, Germination of seed **(V.V.IMP),** Types of fertilization , male and female reproductive system of rabbit**(V.V.IMP)**

CH # 17

Define Biotechnology and explain its scope**(V.V.IMP)**, Basic steps of genetic engineering**(V.V.IMP),** Achievements of genetic engineering, Single cell protein and its importance

CH # 18

Sources of medicinal drugs**(V.V.IMP)** , Note on sedatives, narcotics and hallucinogens, Main groups of, antibiotics**(V.V.IMP)**, Note on antibiotic resistance, mode of action of vaccines**(V.V.IMP)**

IMPORTANT NOTE :

FOR SHORT QUESTIONS foccus on **CH # 10 & 11 For first Section While MAINLY foccus on CH # 15 & 16 for 2nd and 3rd Section respectively .** Because these TWO **CHAPTERS** carry **4** short Questions Each.

FOR **LONG QUESTIONS** foccus on Pairing CH # **11 & 13 AND CH # 17 & 18.**

While CH # 12 & 14 as an optional pair.

IN EACH CHAPTER BOLD QUESTIONS ARE MOST IMPORTANT BECAUSE MAY BE ASKED IN SHORT QUESTIONS AS WELL AS LONG QUESTIONS ALSO.

FOR OBJECTIVES FOLLOW PAST PAPERS OF ALL BOARDS & ALSO FOCCUS ON EXERCISE OBJECTIVES.